

LENNIECH WATER TREATMENT AND AIR PURIFICATION

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PRODUCT DATA SHEET

AMBERLITE™ UP252

Semiconductor Grade Strong Acid Cation Exchange Resin for Industrial Use

AMBERLITE UP252 resin is a semiconductor grade strongly acidic cation exchanger. The matrix is based on macroporous crosslinked polystyrene and the functional groups are sulphonates. Due to the very high quality of the raw materials and the cleaning procedure carried out at the end of the

* 1 BV (Bed Volume) = 1 m^3 solution per m^3 resin

manufacturing process, this resin can be used as a component of mixed beds for the production of ultra-pure water. In this application, AMBERLITE UP252 resin is combined with AMBERLITE UP900 resin.

Matrix	Styrene divinylbenzene copolymer
Functional group	Sulphonic acid
Ionic form as shipped	H ⁺
Total exchange capacity [1]	$\geq 1.7 \text{ eq/L (H}^+ \text{ form)}$
Moisture holding capacity [1]	52 to 58 % (H ⁺ form)
Shipping weight	
Particle size	
Uniformity coefficient	≤ 1.6
Harmonic mean size	0.600 – 0.800 mm
< 0.300 mm ^[1]	0.1 % max
[1] Contractual value Test methods are available on request. SUGGESTED OPERATING CONDIT	TIONS
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Test methods are available on request.	40 % AMBERLITE UP252
Test methods are available on request. SUGGESTED OPERATING CONDIT Composition in volume	40 % AMBERLITE UP252 60 % AMBERLITE UP900
Test methods are available on request. SUGGESTED OPERATING CONDIT Composition in volume Service flow rate	40 % AMBERLITE UP252 60 % AMBERLITE UP900 10 to 30 BV*/h
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Test methods are available on request. SUGGESTED OPERATING CONDIT Composition in volume Service flow rate Linear velocity Bed depth Regeneration	40 % AMBERLITE UP252 60 % AMBERLITE UP900 10 to 30 BV*/h 15 to 40 m/h About 1.50 m for the whole mixed bed
Test methods are available on request. SUGGESTED OPERATING CONDIT Composition in volume Service flow rate Linear velocity Bed depth Regeneration Regenerant	40 % AMBERLITE UP252 60 % AMBERLITE UP900 10 to 30 BV*/h 15 to 40 m/h About 1.50 m for the whole mixed bed HCl: 4-6 %
Service flow rate Linear velocity Bed depth Regeneration Regeneration First regeneration	40 % AMBERLITE UP252 60 % AMBERLITE UP900 10 to 30 BV*/h 15 to 40 m/h About 1.50 m for the whole mixed bed HCl: 4 - 6 % 200 g/L
SUGGESTED OPERATING CONDIT Composition in volume Service flow rate Linear velocity Bed depth Regeneration Regeneration First regeneration Following regenerations	40 % AMBERLITE UP252 60 % AMBERLITE UP900 10 to 30 BV*/h 15 to 40 m/h About 1.50 m for the whole mixed bed HCl: 4-6 % 200 g/L 100 to 150 g/L
Service flow rate Linear velocity Bed depth Regeneration Regeneration First regeneration	40 % AMBERLITE UP252 60 % AMBERLITE UP900 10 to 30 BV*/h 15 to 40 m/h About 1.50 m for the whole mixed bed HCl: 4 - 6 % 200 g/L 100 to 150 g/L 1 to 5 BV/h

COMMISSIONING

At the time of commissioning it is recommended to follow the procedure described in our brochure: Startup procedure for regenerable ultra pure mixed beds.

LIMITS OF USE

AMBERLITE UP252 resin is suitable for industrial uses. For other specific applications such as pharmaceutical, food processing or potable water applications, it is recommended that all potential users seek advice from Rohm and Haas in order to determine the best resin choice and optimum operating conditions.

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